# JosÃ© Alberto HernÃ¡ndez

List of Publications by Year
in descending order



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|---|---|---|---|
| 93 papers | 1,289 citations | 516710 16 h-index | 477307 29 g-index |
| 96 all docs | 96 docs citations | 96 times ranked | 1196 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | All-optical aggregation and distribution of traffic in large metropolitan area networks using multi-Tb/s S-BVTs. Journal of Optical Communications and Networking, 2022, 14, 316. | 4.8 | 4 |
| 2 | Applications of Machine Learning Techniques for What-if Analysis and Network Overload Detection. , 2022, , . | | 2 |
| 3 | Is your FPGA bitstream Hardware Trojan-free? Machine learning can provide an answer. Journal of Systems Architecture, 2022, 128, 102543. | 4.3 | 7 |
| 4 | Voting Margin: A Scheme for Error-Tolerant k Nearest Neighbors Classifiers for Machine Learning. IEEE Transactions on Emerging Topics in Computing, 2021, 9, 2089-2098. | 4.6 | 7 |
| 5 | On the cloudification of Metropolitan Area Networks: impact on cost and energy consumption. , 2021, , . | | 2 |
| 6 | Dimensioning Flex Ethernet Groups for the transport of 5G NR fronthaul traffic in C-RAN scenarios. , 2021, , . | | 1 |
| 7 | A Techno-Economic Study of Optical Network Disaggregation Employing Open Source Software Business Models for Metropolitan Area Networks. IEEE Communications Magazine, 2020, 58, 40-46. | 6.1 | 11 |
| 8 | Decentralized Coordination of Converged Tactile Internet and MEC Services in H-CRAN Fiber Wireless Networks. Journal of Lightwave Technology, 2020, 38, 4935-4947. | 4.6 | 19 |
| 9 | SDN-Enabled S-BVT for Disaggregated Networks: Design, Implementation and Cost Analysis. Journal of Lightwave Technology, 2020, 38, 3037-3043. | 4.6 | 16 |
| 10 | Learning from data: Applications of Machine Learning in optical network design and modeling. , 2020, , . | | 2 |
| 11 | Comprehensive model for technoeconomic studies of next-generation central offices for metro networks. Journal of Optical Communications and Networking, 2020, 12, 414. | 4.8 | 25 |
| 12 | 5G New Radio Fronthaul Network Design for eCPRI-IEEE 802.1CM and Extreme Latency Percentiles. IEEE Access, 2019, 7, 82218-82230. | 4.2 | 37 |
| 13 | Analysis of a hybrid Fixed-Elastic DBA with guaranteed fronthaul delay in XG(s)-PONs. Computer Networks, 2019, 164, 106907. | 5.1 | 6 |
| 14 | Netgen: A Fast and Scalable Tool for the Generation and Labeling of Networking Datasets. , 2019, , . | | 2 |
| 15 | Machine Learning-Based Routing and Wavelength Assignment in Software-Defined Optical Networks. IEEE Transactions on Network and Service Management, 2019, 16, 871-883. | 4.9 | 49 |
| 16 | Meeting the Traffic Requirements of Residential Users in the Next Decade with Current FTTH Standards: How Much? How Long?. IEEE Communications Magazine, 2019, 57, 120-125. | 6.1 | 28 |
| 17 | Machine-Learning based analysis and classification of Android malware signatures. Future Generation Computer Systems, 2019, 97, 295-305. | 7.5 | 23 |
| 18 | CloneSpot: Fast detection of Android repackages. Future Generation Computer Systems, 2019, 94, 740-748. | 7.5 | 6 |

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| 19 | Low-Latency Transmission of Fronthaul Traffic over XG(S)-PON with Fixed-Elastic Bandwidth Reservations. , 2019, , . | | 2 |
| 20 | Analysis and Evaluation of Antivirus Engines in Detecting Android Malware: A Data Analytics Approach. , 2018, , . | | 2 |
| 21 | Machine-Learning-Assisted Routing in SDN-Based Optical Networks. , 2018, , . | | 20 |
| 22 | Fronthaul Network Modeling and Dimensioning Meeting Ultra-Low Latency Requirements for 5G. Journal of Optical Communications and Networking, 2018, 10, 573. | 4.8 | 72 |
| 23 | Android Malware Characterization Using Metadata and Machine Learning Techniques. Security and Communication Networks, 2018, 2018, 1-11. | 1.5 | 19 |
| 24 | Design and Analysis of 5G Scenarios with simmer: An R Package for Fast DES Prototyping. IEEE Communications Magazine, 2018, 56, 145-151. | 6.1 | 13 |
| 25 | SignatureMiner: A Fast Anti-Virus Signature Intelligence Tool. , 2018, , . | | 0 |
| 26 | Salary Prediction in the IT Job Market with Few High-Dimensional Samples: A Spanish Case Study. International Journal of Computational Intelligence Systems, 2018, 11, 1192. | 2.7 | 10 |
| 27 | Delay analysis of mixed fronthaul and backhaul traffic under strict priority queueing discipline in a 5G packet transport network. Transactions on Emerging Telecommunications Technologies, 2017, 28, e3168. | 3.9 | 8 |
| 28 | Towards a unified fronthaul-backhaul data plane for 5G The 5G-Crosshaul project approach. Computer Standards and Interfaces, 2017, 51, 56-62. | 5.4 | 11 |
| 29 | Delay analysis of fronthaul traffic in 5G transport networks. , 2017, , . | | 12 |
| 30 | Network Planning for Dual Residential-Business Exploitation of Next-Generation Passive Optical Networks to Provide Symmetrical 1â€‰â€‰Gb/s Services. Journal of Optical Communications and Networking, 2016, 8, 249. | 4.8 | 2 |
| 31 | Oversubscription Dimensioning of Next-Generation PONs with Different Service Levels. IEEE Communications Letters, 2016, , 1-1. | 4.1 | 4 |
| 32 | An overview of the CPRI specification and its application to C-RAN-based LTE scenarios. , 2016, 54, 152-159. | | 152 |
| 33 | Provisioning 1 Gb/s symmetrical services with next-generation passive optical network technologies. IEEE Communications Magazine, 2016, 54, 72-77. | 6.1 | 15 |
| 34 | pâ€Cycle configuration possibilities over DRDA networks. Transactions on Emerging Telecommunications Technologies, 2015, 26, 1086-1095. | 3.9 | 0 |
| 35 | Android malware detection from Google Play meta-data: Selection of important features. , 2015, , . | | 12 |
| 36 | Packet Coalescing Strategies for Energy Efficient High-Speed Communications Over Plastic Optical Fibers. Journal of Optical Communications and Networking, 2015, 7, 253. | 4.8 | 2 |

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| 37 | Troubleshooting PON networks effectively with carrier-grade ethernet and WDM-PON. , 2014, 52, S7-S7. | | 7 |
| 38 | Heuristics for PON-based 5G backhaul design. , 2014, , . | | 2 |
| 39 | Dissecting the protocol and network traffic of the OnLive cloud gaming platform. Multimedia Systems, 2014, 20, 451-470. | 4.7 | 78 |
| 40 | On the effect of sudden data bursts in the upstream channel of Ethernet PONs employing IPACT under the gated-service discipline. Optical Switching and Networking, 2014, 13, 94-102. | 2.0 | 5 |
| 41 | On the tweet arrival process at Twitter: analysis and applications. Transactions on Emerging Telecommunications Technologies, 2014, 25, 273-282. | 3.9 | 4 |
| 42 | A Bloom Filter-Based Monitoring Station for a Lawful Interception Platform. Communications in Computer and Information Science, 2014, , 214-228. | 0.5 | 0 |
| 43 | Buffer Design Under Bursty Traffic with Applications in FCoE Storage Area Networks. IEEE Communications Letters, 2013, 17, 413-416. | 4.1 | 3 |
| 44 | Performance analysis of Energy Efficient Ethernet on video streaming servers. Computer Networks, 2013, 57, 599-608. | 5.1 | 6 |
| 45 | On providing mobility management in WOBANs: integration with PMIPv6 and MIH. , 2013, 51, 172-181. | | 11 |
| 46 | Multicast service for ultraflow access networks. , 2013, , . | | 1 |
| 47 | Using transparent WDM metro rings to provide an out-of-band control network for OpenFlow in MAN. , 2013, , . | | 2 |
| 48 | Study of the potential energy savings in Ethernet by combining Energy Efficient Ethernet and Adaptive Link Rate. European Transactions on Telecommunications, 2012, 23, 227-233. | 1.2 | 10 |
| 49 | An empirical study of Cloud Gaming. , 2012, , . | | 35 |
| 50 | Managing delay in the access. , 2012, , . | | 5 |
| 51 | A note on the potential energy savings by extending the average cycle times in Passive Optical Networks. , 2012, , . | | 2 |
| 52 | Failure propagation in GMPLS optical rings: CTMC model and performance analysis. Optical Switching and Networking, 2012, 9, 39-51. | 2.0 | 5 |
| 53 | Analysis and simulation of a delay-based service differentiation algorithm for IPACT-based PONs. Photonic Network Communications, 2012, 24, 228-236. | 2.7 | 9 |
| 54 | New insights from the analysis of free flow vehicular traffic in highways. , 2011, , . | | 25 |

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| 55 | Study of a hybrid OCDMA-WDM segmented ring for metropolitan area networks. , 2011, , . | | 2 |
| 56 | On providing metro ethernet services over transparent WDM optical rings. IEEE Network, 2011, 25, 14-19. | 6.9 | 2 |
| 57 | Improving Energy Efficiency in IEEE 802.3ba High-Rate Ethernet Optical Links. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 419-427. | 2.9 | 10 |
| 58 | Analysis of delay mean and variance of collision-free WDM rings with segment recirculation of blocked traffic. Photonic Network Communications, 2011, 21, 278-287. | 2.7 | 0 |
| 59 | Characterization of the busy-hour traffic of IP networks based on their intrinsic features. Computer Networks, 2011, 55, 2111-2125. | 5.1 | 19 |
| 60 | Towards an energy efficient 10 Gb/s optical ethernet: Performance analysis and viability. Optical Switching and Networking, 2011, 8, 131-138. | 2.0 | 23 |
| 61 | A Middleware Architecture for Designing TV-Based Adapted Applications for the Elderly. Lecture Notes in Computer Science, 2011, , 443-449. | 1.3 | 5 |
| 62 | A reliability analysis of Double-Ring topologies with Dual Attachment using p-cycles for optical metro networks. Computer Networks, 2010, 54, 1328-1341. | 5.1 | 12 |
| 63 | Multilayer Traffic Engineering for IP Over WDM Networks Based on Bayesian Decision Theory. Journal of Optical Communications and Networking, 2010, 2, 515. | 4.8 | 4 |
| 64 | Burst Transmission in Energy Efficient Ethernet. IEEE Internet Computing, 2010, , . | 3.3 | 51 |
| 65 | On Local CAC Schemes for Scalability of High-speed Networks. Journal of Networks, 2010, 5, . | 0.4 | 1 |
| 66 | Performance analysis of asynchronous best-effort traffic coexisting with TDM reservations in polymorphous OBS networks. Photonic Network Communications, 2009, 17, 93-103. | 2.7 | 3 |
| 67 | Assembly admission control based on random packet selection at border nodes in Optical Burst-Switched networks. Photonic Network Communications, 2009, 18, 39-48. | 2.7 | 3 |
| 68 | On the blocking time distribution of core OBS switches. Photonic Network Communications, 2009, 18, 314-322. | 2.7 | 3 |
| 69 | Is multilayer networking feasible?. Optical Switching and Networking, 2009, 6, 129-140. | 2.0 | 25 |
| 70 | Performance Evaluation and Design of Polymorphous OBS Networks With Guaranteed TDM Services. Journal of Lightwave Technology, 2009, 27, 2495-2505. | 4.6 | 6 |
| 71 | Performance evaluation of an optical transparent access tier based on PON and spectral codes. IEEE Journal on Selected Areas in Communications, 2009, 27, 143-155. | 14.0 | 2 |
| 72 | Admission control policies in flow-aware networks. , 2009, , . | | 9 |

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| 73 | A multi-layer recovery strategy in FAN over WDM architectures. , 2009, , . | | 7 |
| 74 | Performance evaluation of energy efficient ethernet. IEEE Communications Letters, 2009, 13, 697-699. | 4.1 | 112 |
| 75 | Optical Burst Switching. Computer Communications and Networks, 2009, , 87-130. | 0.8 | 0 |
| 76 | A Bayesian decision theory approach for the techno-economic analysis of an all-optical router (extended version). Computer Networks, 2008, 52, 1916-1926. | 5.1 | 2 |
| 77 | Analysis of Blocking Probability of Data Bursts With Continuous-Time Variable Offsets in Single-Wavelength OBS Switches. Journal of Lightwave Technology, 2008, 26, 1559-1568. | 4.6 | 11 |
| 78 | On the duration and spatial characteristics of internet traffic measurement experiments. IEEE Communications Magazine, 2008, 46, 148-155. | 6.1 | 53 |
| 79 | Analysis of the processing and sojourn times of Burst Control Packets in Optical Burst Switches. , 2008, , . | | 3 |
| 80 | On local CAC schemes for scalability of high-speed networks. , 2008, , . | | 2 |
| 81 | A queueing equivalent thresholding method for thinning traffic captures. , 2008, , . | | 4 |
| 82 | Extension of the Flow-Aware Networking (FAN) architecture to the IP over WDM environment. , 2008, , . | | 14 |
| 83 | On the Early Release of Burst-Control Packets in Optical Burst-Switched Networks. Lecture Notes in Computer Science, 2008, , 31-40. | 1.3 | 3 |
| 84 | Performance comparison of scheduling algorithms for IPTV traffic over polymorphous OBS routers. , 2007, , . | | 3 |
| 85 | Discrete-time heavy-tailed chains, and their properties in modeling network traffic. ACM Transactions on Modeling and Computer Simulation, 2007, 17, 17. | 0.8 | 4 |
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| 87 | On the analysis of burst-assembly delay in OBS networks and applications in delay-based service differentiation. Photonic Network Communications, 2007, 14, 49-62. | 2.7 | 16 |
| 88 | Analysis of average burst-assembly delay and applications in proportional service differentiation. Photonic Network Communications, 2007, 14, 183-197. | 2.7 | 9 |
| 89 | A Quality of Service Assessment Technique for Large-Scale Management of Multimedia Flows. Lecture Notes in Computer Science, 2007, , 173-176. | 1.3 | 0 |
| 90 | Weibull mixture model to characterise end-to-end Internet delay at coarse time-scales. IET Communications, 2006, 153, 295. | 1.0 | 43 |

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| 91 | A Resilience-Based Comparative Study between Optical Burst Switching and Optical Circuit Switching Technologies. , 2006, , . | | 1 |
| 92 | Jitter-based analysis and discussion of burst assembly algorithms. , 2006, , . | | 0 |
| 93 | Learning EPON Delay Models From Data: A Machine Learning Approach. Journal of Optical Communications and Networking, 0, , . | 4.8 | 5 |